## ABSTRACT OF THE DISCLOSURE

A telephony system includes a packet-based data network that is coupled to various network elements. The network elements include interface devices that are coupled to corresponding stimulus devices. The stimulus devices may include stimulus telephones or a telephone exchange system. Each interface device receives a stimulus message from a corresponding stimulus device. The stimulus message is encapsulated by the interface device into a packet, such as an Internet Protocol (IP) packet. The packet is communicated across the data network to the target device, which may be another interface device. At the receiving end, the interface device receives the packet, decapsulates the packet to retrieve the stimulus message, and sends the stimulus message to a corresponding stimulus device.